

SANTOPRENE® 121-85M100

A soft, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance for use in difficult injection molding applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding. It is polyolefin based and recycled within the manufacturing stream.

Key Features

- Used in applications for exterior trims and spoilers for injection molding
- Designed for fast, easy injection molding, especially for complex part geometries
- Used in sealing applications
- Recommended for applications requiring improved part surface appearance
- UL listed: file #QMFZ2.E80017, Plastics - Component; file #QMFZ8.E80017, Plastics Certified For Canada - Component

Typical mechanical properties

Stress at 100% elongation	777 psi	ISO 527-1/-2 or ISO 37
Stress at break	1060 psi	ISO 527-1/-2 or ISO 37
Elongation at break	390 %	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-62 °F	ASTM D 746
Low temperature brittleness	-61.6 °F	ISO 812
Shore A hardness, 15s	89	ISO 48-4 / ISO 868
Shore hardness change, after ageing	1	ISO 48-4 / ISO 868
Compression set at 70°C, 24h	49 %	ISO 815
Compression Set, 125°C, 70h	76 %	ISO 815
Tear strength, normal	188 lb/in	ISO 34-1

Flammability

Burning Behav. at thickness h	HB class	UL 94
Thickness tested	1.1 in	UL 94
UL recognition	yes	UL 94

Other properties

Density	474 lb/gal	ISO 1183
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Injection

Melt Temperature Optimum	419 °F	Internal
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Processing Texts

Processing Notes	Desiccant drying for 3 hours at 80°C (180°F) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to 230°C (350 to 450°F) and is incompatible with acetal and PVC. For physical foaming, a specially modified thermoplastic extruder equipped with an adapted foaming agent dosing device is required. For mechanical foaming, a 30:1 extruder is recommended.	
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Other Approvals

Other Approvals

OEM	Specification	Additional Information
Stellantis - Chrysler	MS-AR-100 DMV	
GM	GMW15812P, Type 8M	
Mercedes-Benz Group (Daimler)	DBL 5562	
Renault	FRM 18-27-118 /---	
VW Group	TL 526 22	MD07
VW Group	VW50123	